

AMENDMENT UNDER 37 C.F.R. §1.111  
USSN: 09/935,569

said substrate surface having an unprocessed region where said coating film is to be left as a necessary film and a processed region where said coating film is to be removed as said unnecessary film,

said gap in said unprocessed region having a size such that temperature distribution is not caused in said resist film under influence of heat transfer from said cover member, and

said cover member being made of a material which hardly transfers heat such that exposure sensitivity of said resist film does not become nonuniform.

2. (Amended) A method of removing, as an unnecessary film, an unnecessary portion of a resist film formed on a surface of a substrate as a substrate surface, comprising :  
covering said substrate surface with a cover member having a top;  
supplying said solvent from the top of said cover member through a supply hole formed at a predetermined position of said cover member; and  
dissolving said unnecessary film by said solvent;  
the cover member defining a gap between an inner surface thereof and said substrate surface,

said substrate surface having an unprocessed region where said coating film is to be left as a necessary film and a processed region where said coating film is to be removed as said unnecessary film,

said gap in said unprocessed region having a size such that temperature distribution is not caused in said resist film under influence of heat transfer from said cover member,

*A1 and*  
temperature distribution is not caused in said resist film formed on a principal surface of said substrate due to convection of gas produced in said gap, and  
said cover member is made of a material which hardly transfer heat such that exposure sensitivity of said resist film does not become nonuniform.

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4. (Amended) A method as claimed in claim 1 or 2, wherein:  
said gap has a size selected so that said solvent supplied to said gap is allowed to pass through said gap and spread in said gap in said processed region.

*A2*  
5. (Amended) A method as claimed in claim 1 or 2, wherein:  
a string-like member having a predetermined thickness is interposed between the inner surface of said cover member and said substrate surface to serve as a gap defining member for defining a size of said gap between the inner surface of said cover member and said substrate surface in said processed region.

6. (Amended) A method as claimed in claim 1 or 2, wherein:  
said unnecessary film is dissolved and removed by said solvent supplied through said supply hole while said substrate and said cover member are rotated together.

7. (Amended) A method as claimed in claim 1 or 2, wherein:

said solvent is supplied from the top of said cover member and also supplied from a rear side of said substrate towards said processed region.

8. (Amended) A device for removing, as an unnecessary film, an unnecessary portion of a resist film formed on a surface of a substrate as a substrate surface by dissolving said unnecessary film with a solvent, comprising:

*Fig 2 cont*  
a cover member covering said substrate surface and having a top; and  
a solvent supply unit for supplying said solvent from the top of said cover member;  
the cover member having a supply hole through which said solvent from said solvent supply unit is supplied to said unnecessary film to thereby dissolve and remove said unnecessary film;

the cover member defining a gap between an inner surface thereof and said substrate surface,

said substrate surface having an unprocessed region where said coating film is to be left as a necessary film and a processed region where said coating film is to be removed as said unnecessary film,

said gap in said unprocessed region having a size such that temperature distribution is not caused in said resist film under influence of heat transfer from said cover member and that temperature distribution is not caused in said resist film due to convection of gas produced in said gap, and

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A2 *and* said cover member is made of a material which hardly transfer heat such that exposure sensitivity of the resist film does not become nonuniform.

☒ Please add the following new claims:

15. (New) A method as claimed in claim 1 or 2, wherein:

said material of said cover member is at least one selected from the group consisting of a resin material, a glass material, a ceramics material, and a composite material comprising a combination thereof.

P3 16. (New) A method as claimed in claim 4, wherein:

said cover member covers said substrate from an upper surface,  
said cover member has a flat portion occupying a major part extending from a center towards an outer periphery,  
a slant portion is formed such that said solvent flows from said flat portion towards said outer periphery,  
a peripheral flat portion having solvent supply holes is formed from said slant portion towards said outer periphery, and  
a side wall portion is extending downward from an outer peripheral edge of said peripheral flat portion in a direction substantially perpendicular thereto.

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17. (New) A method as claimed in claim 16 wherein;

193 *end*  
said gap between said inner surface of said cover member and said substrate surface falls within a range between 0.05 mm and 3 mm in said processed region where said resist film is to be removed as said unnecessary film,

said gap between said inner surface of said cover member and said substrate surface falls within a range between 0.05 mm and 20.0 mm in said unprocessed region where said resist film is to be left as said necessary film, and

another gap between an inner surface of a side wall portion of said cover member and a side surface of said substrate has a size such that said solvent passes through said gap in contact with said resist film.

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